

**Notice of Allowability**

Application No.

09/887,669

Examiner

Michael Brannock

Applicant(s)

SCHLESSINGER ET AL.

Art Unit

1646

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/6/05.
2. ☒ The allowed claim(s) is/are 1,2,5,6 and 9-36.
3. ☒ The drawings filed on 07 February 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 06/06/05
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other an

ANTHONY C. CAPUTA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

Art Unit: 1646

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Eve Frank on June 6, 2005.

The application has been amended as follows:

---

E.A.

Please cancel claims 3, 4, 7 and 8.

---

### *Conclusion*

Please note the new central fax number for official correspondence below:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Brannock, Ph.D., whose telephone number is (571) 272-0869. The examiner can normally be reached on Mondays through Fridays from 10:00 a.m. to 4:00 p.m.

Art Unit: 1646

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa, Ph.D., can be reached at (571) 272-0829. Official papers filed by fax should be directed to 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

MB

A handwritten signature, possibly reading 'MB', is written in black ink.

June 10, 2005

**In the Claims:**

In accordance with 37 CFR §1.121, please substitute for original claims 1-12 for the following rewritten versions of the same claims, as amended. The changes are shown explicitly in the attached "Version with Markings to Show Changes Made."

1. (Amended) An isolated antibody which specifically binds to a mammalian protein or glycoprotein comprising the amino acid sequence of SEQ ID NO: 1.
2. (Amended) The antibody of claim 1, wherein the antibody is a monoclonal antibody.
3. (Amended) An isolated antibody which specifically binds to a mammalian receptor-type phosphotyrosine phosphatase  $\kappa$  protein or glycoprotein encoded by (a) a nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO: 3; or (b) a nucleic acid molecule comprising a nucleotide sequence which hybridizes to the complement of a nucleotide sequence that encodes the polypeptide of SEQ ID NO: 1 under hybridization conditions at least as stringent as the following: hybridization in 50% formamide, 5x SSC, 50mM  $\text{NaH}_2\text{PO}_4$ , pH 6.8, 0.5% SDS, 0.1 mg/ml sonicated salmon sperm DNA and 5x Denhart solution at 42°C overnight; washing with 2x SSC, 0.1% SDS at 45°C; and washing with 0.2x SSC, 0.1% SDS at 45°C.
4. (Amended) The antibody of claim 3, wherein the antibody is a monoclonal antibody.
- 3 5. (Amended) An isolated antibody which specifically binds to a protein or glycoprotein comprising the full length amino acid sequence of SEQ ID NO: 2, wherein said antibody binds to an epitope located within the amino acid sequence of SEQ ID NO: 2.

4 ~~6~~. (Amended) The antibody of claim <sup>3</sup>~~6~~, wherein the antibody is a monoclonal antibody.

7. (Amended) An isolated antibody which specifically binds to a mammalian receptor-type tyrosine phosphatase  $\kappa$  protein or glycoprotein encoded by (a) a nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO: 4; or (b) a nucleic acid molecule comprising a nucleotide sequence which hybridizes to the complement of a nucleotide sequence that encodes the polypeptide of SEQ ID NO:2 under hybridization conditions at least as stringent as the following: hybridization in 50% formamide, 5x SSC, 50mM NaH<sub>2</sub>PO<sub>4</sub>, pH 6.8, 0.5% SDS, 0.1 mg/ml sonicated salmon sperm DNA and 5x Denhardt's solution at 42°C overnight; washing with 2x SSC, 0.1% SDS at 45°C; and washing with 0.2x SSC, 0.1% SDS at 45°C.

8. (Amended) The antibody of claim 7, wherein the antibody is a monoclonal antibody.

5 ~~9~~. (Amended) An isolated antibody which specifically binds to a mammalian protein comprising at least one of the following domains in SEQ ID NO: 1: the signal peptide domain, the MAM domain, the Ig-like domain, one of the four FN-type III like domains, the phosphatase I domain, the phosphatase II domain, the extracellular domain, the transmembrane domain or the intracellular domain, wherein said antibody binds to an epitope located within the amino acid sequence of SEQ ID NO:1.

6 ~~10~~. (Amended) The antibody of claim <sup>5</sup>~~9~~, wherein the antibody is a monoclonal antibody.

7 ~~11~~. (Amended) An isolated antibody which specifically binds to a mammalian protein comprising at least one of the following domains in SEQ ID NO:2: the signal peptide domain, the MAM domain, the Ig-like domain, one of the four FN-type III like domains, the phosphatase I domain, the phosphatase II domain, the extracellular domain, the transmembrane domain or the intracellular domain, wherein said antibody binds to an epitope located within the amino acid sequence of SEQ ID NO:2.

8 ~~12~~. (Amended) The antibody of claim <sup>7</sup>~~11~~, wherein the antibody is a monoclonal antibody.

Please add the following new claims:

- 9/13. (New) The isolated antibody of claim 5 which binds to the signal peptide domain.
- 10/14. (New) The isolated antibody of claim 5 which binds to the MAM domain.
- 11/15. (New) The isolated antibody of claim 5 which binds to the Ig-like domain.
- 12/16. (New) The isolated antibody of claim 5 which binds to a FN-Type III domain.
- 13/17. (New) The isolated antibody of claim 5 which binds to the phosphatase I domain.
- 14/18. (New) The isolated antibody of claim 5 which binds to the phosphatase II domain.
- 15/19. (New) The isolated antibody of claim 5 which binds to the extracellular domain.
- 16/20. (New) The isolated antibody of claim 5 which binds to the transmembrane domain.
- 17/21. (New) The isolated antibody of claim 5 which binds to the intracellular domain.
- 18/22. (New) The isolated antibody of claim 7 which binds to the signal peptide domain.
- 19/23. (New) The isolated antibody of claim 7 which binds to the MAM domain.
- 20/24. (New) The isolated antibody of claim 7 which binds to the Ig-like domain.
- 21/25. (New) The isolated antibody of claim 7 which binds to a FN Type-III domain.
- 22/26. (New) The isolated antibody of claim 7 which binds to the phosphatase I domain.

23 ~~21~~. (New) The isolated antibody of claim ~~1~~<sup>7</sup> which binds to the phosphatase II domain.

24 ~~28~~. (New) The isolated antibody of claim ~~1~~<sup>7</sup> which binds to the extracellular domain.

25 ~~29~~. (New) The isolated antibody of claim ~~1~~<sup>7</sup> which binds to the transmembrane domain.

26 ~~30~~. (New) The isolated antibody of claim ~~1~~<sup>7</sup> which binds to the intracellular domain.

27 ~~31~~. (New) An isolated antibody which specifically binds to a polypeptide comprising amino acids 60-76 of SEQ ID NO:1.

28 ~~32~~. (New) An isolated antibody which specifically binds to a polypeptide amino acids 910-929 of SEQ ID NO:1.

29 ~~33~~. (New) An isolated antibody which specifically binds to a mammalian protein or glycoprotein comprising the amino acid sequence of SEQ ID NO:1, wherein said antibody binds to the transmembrane domain.

30 ~~34~~. (New) An isolated antibody which specifically binds to a mammalian protein or glycoprotein comprising the amino acid sequence of SEQ ID NO:2, wherein said antibody binds to the transmembrane domain.

31 ~~35~~. (New) An isolated antibody which specifically binds to an extracellular domain of a mammalian protein or glycoprotein of SEQ ID NO:1.

32 ~~36~~. (New) An isolated antibody which specifically binds to an extracellular domain of a mammalian protein or glycoprotein of SEQ ID NO:2.